VILLAGE OF BURR RIDGE PUBLIC WATER SUPPLY 2012 CONSUMER CONFIDENCE REPORT



The Village of Burr Ridge, in compliance with The Safe Drinking Water Act (SDWA), is issuing this year's Consumer Confidence Report (CCR) for the period of January 1 to December 31, 2011. This report is intended to provide you with important information about the quality and source of your drinking water. During 2011, the water provided by the Village met all USEPA and state drinking water quality standards and we are pleased to report that there were no violations during this period. The Village dilligently monitors the water distribution system by taking a minimum of 10 samples for bacteriological testing each month. We are

committed to providing you with the safest and most reliable water supply possible. Periodically, water issues are addressed by the Village Board of Trustees. The Village Board meets on the second and fourth Monday of each month at 7:00 PM at the Burr Ridge Village Hall, 7660 S. County Line Rd, Burr Ridge, IL 60527. Public comments or statements regarding the public water supply are welcome. If you have any questions about this report or concerns about your water system, please contact James Lukas, Water and Sewer Division of the Village of Burr Ridge Public Works Department at (630) 323-4733 ext. 6050. This report is also available on the Village of Burr Ridge website http://www.burr-ridge.gov.

SOURCE WATER

In 2011, all the water that the Village of Burr Ridge distributed came from Lake Michigan. Lake Michigan water, is treated by the City of Chicago, and is purchased through the Village of Bedford Park. Burr Ridge also has three stand-by wells that **were not used** during 2011. These wells are tested and maintained in working order and are intended to be used **in case of emergency only**.

Lake Michigan is a surface water supply, which provides drinking water for Chicago and 125 suburban communities. It serves as a source of drinking water, as a place for swimming and fishing, and is utilized for both recreational boating and commercial shipping. Further information on our community's source water assessment is available on the USGS web site at http://www.epa.state.il.us/water/, the City of Chicago Department of Water Management at http://www.cityofchicago.org/WaterManagement/ or by calling the Groundwater Section of the Illinois EPA at 217-785-4787.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

EPA regulations restrict industrial and sewage treatment plant effluents from entering Lake Michigan, thereby reducing the risk of having these contaminants in the surface water supply.

In order to ensure that tap water is safe to drink, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with

HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

ABOUT THE DATA & DATA TABLE FOOTNOTES

Turbidity - Turbidity is a measure of the cloudiness of the water. Chicago monitors it because it is a good indicator of water quality and the effectiveness of their filtration system and disinfectants.

Lead - Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than in other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to flush your tap for 30 seconds to 2 minutes before using the water, or have your water tested by an independent laboratory. Testing for lead done by the Village of Burr Ridge shows results either not detectable or well below the Action Level. Additional general information is available from the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

Asbestos - Chicago examines samples for asbestos fibers on a routine basis. The EPA has determined that asbestos fibers greater than 10 microns in length could potentially cause lung cancer. They have not found fibers that are in this size category.

Haloacetic acids - Additional disinfectant by-products are being monitored. Chicago began analyzing for these compounds in July 1998. In December, 1998 the rule was finalized which set an MCL for HAAs at 60 ppb. Thus far, testing shows that Chicago is averaging 11.8 ppb, which is comfortably below the regulated level. The range of detections was 8.0 - 22.0 ppb. The Village of Burr Ridge also monitors for these by-products and our testing also shows results well below the regulated level.

Cryptosporidium - Analyses have been conducted monthly on the source water since April 1993. Cryptosporidium has not been detected in these samples. Treatment processes have been optimized to ensure that if there are cryptosporidium cysts in the source water, they will be removed during the treatment process. By maintaining a low turbidity and thereby removing the particles from the water, the threat of cryptosporidium organisms getting into the drinking water system is greatly reduced.

Fluoride - Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

Sodium - There currently is not a state or federal Maximum Contaminant Level for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Voluntary testing - The Chicago Water Department and the Village of Burr Ridge both monitor for contaminants, which are proposed to be regulated, or for which no standards currently exist but which could provide useful information in assessing the quality of the source water or the drinking water.

Unregulated Contaminants - A maximum contaminant level (MCL) for other contaminants has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring other contaminants is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

DEFINITION OF TERMS

<u>Maximum Contaminant Level Goal (MCLG</u>): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

<u>Level Found</u>: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

<u>Collection Date</u>: If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

<u>Violation (V)</u>: If a violation had occurred an explanation of the violation and corrective measures taken would be explained in the informational section of this report

<u>nd:</u> Not detectable at testing limits.

n/a: Not applicable.

<u>Units of Measure</u> ppb - Parts per billion, or micrograms per liter (ug/l)

ppm - Parts per million, or milligrams per liter

NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%<0.5 NTU - Percent samples less than 0.5 NTU

pCi/L - Picocuries per liter, used to measure radioactivity

CITY OF CHICAGO 2011 VIOLATION SUMMARY TABLE

NO DRINKING WATER QUALITY VIOLATIONS WERE RECORDED DURING 2011

CITY OF CHICAGO 2011 WATER QUALITY DATA Regulated Contaminants Detected

Regulated Contaminants Detected									
Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Collection Date			
Microbial Contaminants									
TOTAL COLIFORM BACTERIA (% positive / mo.) Human and animal fecal waste. Naturally present in environment	0 ent.	5%	0.2%	n/a		2011			
FECAL COLIFORM AND E.COLI* (# positive / mo.)	0	0	1	n/a		2011			
Human and animal fecal waste. Naturally present in environme *No more than 5.0% samples total coliform-positive in a mon coliform-positive per month.) Every sample that has total coli positive for E. coli fecal coliforms, system has an acute MCL vi	th. (For water form must be								
TURBIDITY (%< 0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT	99.50%	99.50% - 100.000%		2011			
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT=1NT	Umax 0.86	n/a		2011			
Inorganic Contaminants									
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0208	0.0201 - 0.0208		2011			
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural Deposits.	1.3	AL = 1.3	0.0323 (90 th percentile)	0 sites exceeding	AL	8/18/2009			
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural Deposits.	0	AL = 15	6.07 (90 th percentile)	1 site exceeding A	AL	8/18/2009			
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.44	0.39 - 0.44		2011			
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.44	0.39 – 0.44		2011			
Disinfectants/Disinfection By-Produc	<u>:ts</u>								
CHLORINE (as Cl2) (ppm) Drinking water disinfectant	4.0	4.0	0.80	0.702 – 0.817	77				
TTHMs (TOTAL TRIHALOMETHANES) (ppb) By-product of drinking water disinfection.	n/a	80	20.000*	9.4 - 32.9					
HAA5 (HALOACETIC ACIDS) (ppb) By-product of drinking water disinfection.	n/a	60	11.0	5.3 – 14.5					

TTHMs, HAA5s and Chlorine are for the City of Chicago distribution system. *Highest Running Annual Average Computed.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA

Unregulated Contaminants

SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	16.1	14.4 – 16.1	 2011
SODIUM (ppm) Frosion of naturally occurring deposits: Used as water softener	n/a	n/a	6.64	6.63 - 6.64	 2011

State Regulated Contaminants

FLOURIDE (ppm) Water additive, which promotes strong teeth.	4	4	0.92	0.81 – 0.92	 2011
Radioactive Contaminants					
COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits.	0	5	1.38	1.300 - 1.380	 3/17/2008
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits.	0	15	0.88	0.090 - 0.880	 3/17/2008

Voluntary Monitoring

Contaminant (unit of measure)

The City of Chicago monitors for contaminants, which are proposed to be regulated, or for which no standards currently exist but which could provide useful information in assessing the quality of the source water or the drinking water. Chicago has continued monitoring for Cryptosporidium, Giardia, E. coli in its source water. Cryptosporidium has not been detected in these samples, but Giardia was detected in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process.

VILLAGE OF BEDFORD PARK 2011 WATER QUALITY DATA

NO DRINKING WATER QUALITY VIOLATIONS WERE RECORDED DURING 2011

Regulated Contaminants Detected

Regulated Contaminant Likely Source of Contamination	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Collection Date
CHLORINE (ppm) Drinking water disinfectant used to control microbes.	4	4	0.7	0.6083 - 0.75	No	1/1/2011
TOTAL HALOACETIC ACIDS (HAA5)* (ppb) By-product of drinking water disinfection.	n/a	60	8	7.7 – 7.7	No	2011
TOTAL TRIHALOMETHANES (TTHM)* (ppb) By-product of drinking water disinfection.	n/a	80	35	35 – 35	No	2011

^{*}Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

VILLAGE OF BURR RIDGE 2011 VIOLATION SUMMARY TABLE

NO DRINKING WATER QUALITY VIOLATIONS WERE RECORDED DURING 2011

VILLAGE OF BURR RIDGE 2011 WATER QUALITY DATA Regulated Contaminants Detected

Level

Range of

Collection

Likely Source of Contamination	MCLG	MCL	Found	Detections	Violation	Date
Microbial Contaminants						
TOTAL COLIFORM BACTERIA (# positive samples/m Human and animal fecal waste. Naturally present in environment	,	>1	nd		No	monthly
Contaminant (unit of measure) Likely Source of Contamination	MCLG	Action Level (AL)	90 th Percentile	No. of Sites Over AL	Violation	Collection n Date
Inorganic Contaminants						
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits. Naturally present in the environment.	0	15	3.5	1	No	6/1/2011 - 9/30/2011* (3 year schedule)
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits.	1.3	1.3	0.077	0	No	6/1/2011 -9/30/2011* (3 year schedule)

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Regulated Contaminant			Highest	Range of	Collection	
Likely Source of Contamination	MCLG	MCL	Level Detected	Detections	Violation	Date
Disinfectants/Disinfection By-Production	ucts					
CHLORINE (ppm) Drinking water disinfectant used to control microbes.	4	4	0.8	0.587 - 0.905	No	2011
TOTAL HALOACETIC ACIDS (HAA5)* (ppb) By-product of drinking water chlorination.	n/a	60	14.0	7.8 – 19	No	2011
TOTAL TRIHALOMETHANES (TTHM)* (ppb)	n/a	80	40.0	26.0 - 57.0	No	2011

*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

VILLAGE OF BURR RIDGE EMERGENCY STANDBY WELL WATER QUALITY DATA (EMERGENCY STANDBY WELL WATER NOT USED IN VILLAGE WATER DISTRIBUTION SYSTEM DURING 2011)

Regulated Contaminant			Highest	Range of		ollection
Likely Source of Contamination	MCLG	MCL	Level Detected	Detections	Violation	Date
Inorganic Contaminants						
Arsenic (ppb) Erosion of natural deposits; runoff from orchards and glass And electronics production wastes.	0	10	5.5	4 – 5.5	No	2011
Barium (ppm) Discharge of drilling wastes and metal refineries; erosion of natural deposits.	2	2	0.052	0.022 - 0.052	No	2011
Fluoride (ppm) Erosion of natural deposits; water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.	4	4	0.33	0.26 - 0.33	No	2011
Iron (ppm) Erosion of natural deposits.	n/a	1.0	3.4	1.4 – 3.4	No	2011
Manganese (ppb) Erosion of natural deposits.	150	150	69	17 – 69	No	2011
Nitrate (measured as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.047	0 - 0.047	No	2011
Sodium (ppm) Erosion of natural deposits.	n/a	n/a	33	28 – 33	No	2011
Zinc (ppm) Erosion of natural deposits.	5	5	0.017	0 – 0.017	No	2011
Radioactive Contaminants						
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits.	0	15	2.71	0 – 2.71	No	2011
Uranium (ug/l) Erosion of natural deposits	0	30	4.0379	0 – 4.0379	No	2011

CONSUMER EDUCATION

(Some material courtesy of the American Water Works Association and EPA)

- The Village of Burr Ridge pumped a total of 619,788,966 gallons into the water distribution system in 2011; a daily average of 1,694,192 gallons. The peak 24 hour period was 4,606,592 gallons.
- On average, 50% 70% of household water is used outdoors for watering lawns and gardens. Make the most of the water you use outdoors by never watering at the hottest times of the day or when it's windy. Turnoff your sprinklers when it's raining.
- As much as 30% of water can be lost to evaporation by watering the lawn during midday.
- Chlorine is a disinfectant used to kill bacteria during the treatment process and to prevent regrowth of bacteria in the water distribution system. To remove the chlorine taste or smell from water, fill a pitcher of water and refrigerate overnight.
- During winter months, cold water holds more dissolved oxygen than warm water. As cold water enters your home it is warmed as it sits in the interior pipes. This forces the dissolved oxygen out of the water in the form of bubbles, which makes the water seem cloudy. Running the water for a short period of time will eliminate this condition.
- To find easy practices you can undertake at home to reduce your water bill and environmental impact, visit http://www.epa.gov/watersense.
- In order for the Village of Burr Ridge to comply with EPA and Illinois Plumbing Code regulations, all businesses and residential homes with an RPZ or other testable devise for backflow prevention are required to have it inspected yearly by a licensed plumber certified in backflow testing. The Village Cross Connection Control Program (Village Municipal Code, Chapter 58, Section 58.56) is designed to reduce the likelihood of drinking water contamination caused by cross connections and backflow. Implementation of this program is required of all public water supplies.
- Since May 2012, the Village has contracted with Backflow Solutions, Inc. (BSI) to administer the Village's cross-connection control / backflow tracking program. The backflow testing company is required to submit your backflow test results online via BSI Online's secure website. All backflow test reports for the Village must be entered using the BSI Online system.

VILLAGE OF BURR RIDGE 7660 S. COUNTY LINE ROAD BURR RIDGE, IL 60527

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2012 Consumer Confidence Report

Important Information
Regarding the
Village of Burr Ridge
Drinking Water Supply